

<u>'275 Patent Claim</u>	<u>Comcast's Accused Instrumentality</u>
	<p>as ordered (e.g., time encoded) data blocks.</p> <p>Items of digital video information are assigned an identification code used to identify and/or locate the item of information. Prerecorded compressed, digital video information is stored by the content providers or Comcast on servers prior to transmission.</p> <p>Following MPEG-2 compression, the compressed video and/or audio information for an item is stored as a file. For instance, it is known that at least some of Comcast's content providers, such as STARZ, use Pinnacle Systems video servers to store audiovisual items prior to transmission. (See, "STARZ Encore Productivity and Air Operation," broadcastengineering.com and "STARZ Encore Group," broadcastengineering.com). Further, CED's North American VOD deployments wallchart published in April 2005 states that Comcast uses Seachange and Concurrent video servers at its head ends.</p> <p>For instrumentality 3(b), an identification code is required by the Society Of Cable Telecommunications Engineers, Inc. (SCTE) specification SCTE 97 2004, "Metadata Requirements for Video-On-Demand in Cable Networks", pg. 5, Req. # OP-5 and is used to track usage of the item and its location:</p> <p>"Metadata must support unique Package ID/ Asset ID Content ID and creation date for each Package/Asset and may support unique ID down to each instance."</p> <p>"Unique ID to track usage of content and where it is located...."</p>
<p>sending a request, by the user to the transmission system, for at least a part of the stored information to be transmitted to a reception system associated with a receiving system at one of the remote locations selected by the user;</p>	<p>In instrumentality nos. 3(b) and 3(d), users send requests to the transmission system for at least a part of the stored information to be transmitted to a reception system associated with a receiving system at one of the remote locations selected by the user.</p> <p>Comcast subscribers transmit requests to Comcast head ends identifying video on demand (VOD) programs to be sent from the Comcast head end to one of the subscribers' set top boxes having a DVR at their home. In one embodiment, the set top boxes having DVR may be associated with other set top boxes in other locations and may transmit the received, stored program to those other set top boxes. Comcast subscribers may have more than one outlet in their home for connecting a set top box to the cable network, each outlet being in a different remote location (e.g., living room, bedroom). By selecting a particular outlet for a set top box within their home, the Comcast subscriber has selected a location (e.g., living room), which is remote from the transmission system and remote from the reception system.</p> <p>In another embodiment, the program is transmitted from the head end to one or more remote distribution hubs.</p>
<p>sending at least a portion of the stored information from the transmission system to the reception system;</p>	<p>In instrumentality nos. 3(b) and 3(d), Comcast sends at least a portion of the stored information to a reception system.</p> <p>In one embodiment, Comcast sends the requested, stored information (or a portion of the stored information) from its head end(s) to a set top box. In another embodiment, the program is transmitted from the head end to one</p>

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	<p>broadcastengineering.com and "STARZ Encore Group," broadcastengineering.com). Further, CED's North American VOD deployments wallchart published in April 2005 states that Comcast uses Seachange and Concurrent video servers at its head ends.</p> <p>For instrumentality 3(b), an identification code is required by the Society Of Cable Telecommunications Engineers, Inc. (SCTE) specification SCTE 97 2004, "Metadata Requirements for Video-On-Demand in Cable Networks", pg. 5, Req. # OP-5 and is used to track usage of the item and its location:</p> <p>"Metadata must support unique Package ID/ Asset ID Content ID and creation date for each Package/Asset and may support unique ID down to each instance."</p> <p>"Unique ID to track usage of content and where it is located...."</p>
<p>sending a request, by the user to the transmission system, for at least a part of the stored information to be transmitted to a reception system associated with a receiving system at one of the remote locations selected by the user;</p>	<p>In instrumentality nos. 3(b) and 3(d), users send requests to the transmission system for at least a part of the stored information to be transmitted to a reception system associated with a receiving system at one of the remote locations selected by the user.</p> <p>Comcast subscribers transmit requests to Comcast head ends identifying video on demand (VOD) programs to be sent from the Comcast head end to one of the subscribers' set top boxes having a DVR at their home. In one embodiment, the set top boxes having DVR may be associated with other set top boxes in other locations and may transmit the received, stored program to those other set top boxes. Comcast subscribers may have more than one outlet in their home for connecting a set top box to the cable network, each outlet being in a different remote location (e.g., living room, bedroom). By selecting a particular outlet for a set top box within their home, the Comcast subscriber has selected a location (e.g., living room), which is remote from the transmission system and remote from the reception system.</p> <p>In another embodiment, the program is transmitted from the head end to one or more remote distribution hubs.</p>
<p>sending at least a portion of the stored information from the transmission system to the reception system over an optical fiber communication path;</p>	<p>In instrumentality nos. 3(b) and 3(d), it is believed that Comcast sends at least a portion of the stored information to reception system over an optical fiber communication path.</p> <p>In one embodiment, it is believed that Comcast sends the requested, stored information (or a portion of the stored information) from its head end(s) to set top box over an optical fiber communication path. In another embodiment, the sent information is received by the remote distribution hub.</p>
<p>receiving the sent information by the reception system;</p>	<p>In instrumentality nos. 3(b) and 3(d), the sent information is received by the reception system.</p> <p>In one embodiment, the requested, stored information (or a portion of the stored information) transmitted by Comcast from its head end(s) is received by the set top box with DVR.</p> <p>In another embodiment, the sent information is received by the remote</p>

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	distribution hub.
storing a complete copy of the received information in the reception system; and	In instrumentality nos. 3(b) and 3(d), the reception system stores a complete copy of the received information. In one embodiment, the set top box with DVR stores a complete copy of the requested program. In another embodiment, a complete copy of the program is stored at the remote distribution hub.
playing back the stored copy of the information sent over a cable communication path from the reception system to the receiving system at the selected remote location at a time requested by the user.	In instrumentality nos. 3(b) and 3(d), the user plays back the stored copy of the information from the reception system to the receiving system over a cable communication path at the selected remote location at time requested by the user. In one embodiment, after receiving and storing a complete copy of the program on the DVR, the Comcast subscriber may use the reception system to transmit over a cable communication path a copy of the program to another set top box in another location to watch the program at any time requested by the subscriber. In another embodiment, the user plays back the program from the remote distribution hub using their set top box at a time requested by the user.

B. '863 Patent

<u>'863 Patent Claim</u>	<u>Comcast's Accused Instrumentality</u>
14. A method of distributing audio/video information comprising:	Acacia accuses Comcast of infringing claim 14 of the '863 patent with its instrumentality no. 4(c). Comcast receives digital video and/or audio advertising from a content provider, encoder, or from Comcast Advertising Services. Comcast transmits that digital video information to its subscribers and therefore performs a method of distributing audio/video information.
transmitting compressed, digitized data representing a complete copy of at least one item of audio/video information at a non-real time rate from a central processing location;	In instrumentality no. 4(c), Comcast or its content providers transmit compressed, digitized data representing a complete copy of at least one item of audio/video information (advertisements) from the central processing location. For instance, Comcast's video-on-demand content provider, HBO On Demand, distributes its video content at two-times real time (a non-real time rate) by transmitting its video via satellite in an MPEG-2 format wrapped in IP with an Internet-based return path. (See, Peter J. Brown, <i>Cable Looks to Heavens, Broadcasting & Cable</i> , November 18, 2002 reported at www.broadcastingcable.com/index.asp?layout=story_stocks&articleid=CA259568). The Internet Protocol (IP) multicast protocol is capable of transmitting at multiple bit rates. Thus, a video server to video server file transfer of an MPEG-2 file can also occur at a non-real time rate.
receiving the transmitted	In instrumentality no. 4(c), Comcast's head ends (local distribution